

REMARKS

Drawings and Specification Objections

In response to the drawing objections, Applicant has amended FIG. 3A to remove lines 4-4. Applicant has reviewed the specification for typographical errors, and submits herewith a marked-up copy showing the corrections, as well as a substitute specification to be made part of the file wrapper. No new matter has been added

In particular:

a. Applicant has deleted the text "taken along lines 4A-4A of FIG. 3A" in paragraph [0027] of the marked-up substitute specification.

b. Applicant has deleted the text "alternative" in paragraph [0027].

c. Applicant has deleted the text "taken along lines 4E-4E of FIG. 4A" in paragraph [0027], and ", which is a sectional view taken along lines 4E-4E of FIG. 4A" in paragraph [0057].

d. Applicant has added the text "FIG. 9C shows the actuation cylinder replaced by a multi-chambered or stacked actuation cylinder;" to paragraph [0027]. Support for the added text can be found in paragraph [0088].

e. Applicant has deleted the text "2F" and inserted therefor "9B" in paragraph [0027].

f. Reference number 33 can be found in FIG. 2A, and reference number 34 can be found in FIG. 4F. Applicant has added reference number 34 to FIG. 2A.

g. Applicant has deleted the text "FIG. 2 shows the frame 34 leaned to one side. That is, the frame 34 is" and inserted therefor "Frame 34 can be" in paragraph [0031].

h. Applicant has deleted the text "Referring back to FIG. 2 it can be seen that the" and inserted therefor "The" in paragraph [0035]

Applicant believes the above amendments clear up the understanding of FIGs. 2A and 2B and paragraph [0031] and [0035].

i. Applicant has deleted the text "ends of the lower arm 35 and" and inserted therefor "end of" in paragraph [0032].

j. Reference number 34 can be found in FIGs. 4D, 4F, 4G, 9A, and 9B. Applicant has added reference number 34 to FIG. 2A.

k. FIGs. 2A and 3A show the central beam of arm 35 differently, because each shows a different embodiment of how the lower arm may be configured. Applicant has amended the text in paragraph [0034] from "FIG. 3A shows one of the arm assemblies 25" to "FIG. 3A shows one embodiment of the arm assemblies 25."

l. Applicant has deleted the text "Referring back to FIG. 2 it can be seen that the" and inserted therefor "The" in paragraph [0035]. Furthermore, as recited in paragraph [0035], "connection 75 is located above the upper control arm 36 at one end of the range of motion. The third connection 75 is below the upper control arm 36 at the other end of the range of motion." FIGs. 2A and 3A each show only one relative position of the third connection 75 and the upper control arm 36 within the range described by paragraph [0035].

m. Applicant has changed the existing use of reference number 84 in FIG. 3B so that reference number 84 now only appears once. Reference number 85 is not included in FIG. 3B, and Applicant has deleted reference number 85 from the text in paragraph [0041].

n. Applicant has changed reference number 84 in FIG. 3B to agree with reference number 84 in FIG. 4A.

o. Applicant has removed the reference to section line 4B-4B at the bottom of FIG. 4A.

p. Applicant has added reference number 95 in FIG. 4A.

q. Reference number 23 can be found in FIG. 6.

r. Applicant has added reference number 225 in FIG. 7.

s. Applicant has added reference number 269 in FIG. 8.

t. Applicant has added reference number 272 in FIG. 8.

u. Reference number 346 can be found in FIG. 9C.

Reference number 346 indicates the common shaft in the stacked actuation cylinder 333.

Claim Objections

The Office Action objects to the claims for not being in accordance with 37 C.F.R. 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. Applicant has renumbered the claims to their original numbering.

35 U.S.C. § 112 Rejection

The Office Action rejects claim 24-48 and 44-48 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has amended claims 24, 25, 32, 44, and 46-48 to overcome the 112 rejection.

a. Applicant has removed the references to the actuator arm being pivotally connected to the lower arm previously included in claims 24 and 32.

b. Applicant has cancelled Claim 25.

c. Applicant has removed the word "similar" from claim 44. Claim 44 now recites a second arm assembly comprising a second lower arm, a second upper control arm, a second actuator arm, and a second actuator.

d. Applicant has amended claim 46 to recite a greater or lesser volume of a fluid for each shock absorber. The effective volume is the volume of fluid of each shock absorber.

e. Applicant has amended claim 46 to recite the effective volume varying with an expansion or contraction of the fluid. Support for the change can be found in paragraph [00110] of the subject application.

35 U.S.C. § 102 Rejection

The Office Action rejects claims 24, 29, 32, 36 and 44 under U.S.C. 102(b) as being anticipated by US Publication US005324056A (Orton). Per Examiner's recommendation Applicant has amended claim 26 to include all of the relevant limitations of base claim 24 and intervening claim 25. Applicant has not incorporated into claim 26 the reference in claim 24 to the actuator arm being pivotally connected to the lower arm.

As amended claim 26 recites a vehicle suspension comprising a lower arm having an inboard end and an outboard end, and an upper control arm having an inboard end and an outboard end. The upper control arm is pivotally connected to the lower arm. The vehicle suspension further includes an actuator comprising an actuation mechanism and at least one actuator arm. The actuator arm pivotally connects to the upper control arm, and the actuator movably connects to the upper control arm by the actuator arm. The vehicle suspension includes a cammed cylinder

in fluid communication with the actuation mechanism that at least partially controls the actuator arm, and the actuation mechanism connects to the actuator arm. The actuation mechanism includes a mechanical shock absorber, and an actuator line connects the cammed cylinder to the mechanical shock absorber.

Claim 26 is now believed to patentably distinguish over the prior art reference of record. Claims 27-31 are believed to be in condition for allowance as each is dependent from an allowable base claim.

Per Examiner's recommendation Applicant has amended claim 33 to include all of the limitations of base claim 32 except the reference to the actuator arm being pivotally connected to the lower arm. As amended claim 33 recites a frame and suspension for a vehicle comprising a frame, a lower arm having an inboard end coupled to the frame and an outboard end, and an upper control arm having an inboard end and an outboard end. The upper control arm pivotally connects to the lower arm. The frame and suspension includes an actuator comprising an actuation mechanism and at least one actuator arm. The actuator arm pivotally connects to the upper control arm, and the actuation mechanism connects to the actuator arm. The frame and suspension further includes a cammed cylinder having a piston in fluid communication with the actuation mechanism that at least partially controls the actuator arm, and the actuator motively connects to the upper control arm by the actuator arm.

Claim 33 is now believed to patentably distinguish over the prior art reference of record. Claims 34-46 are believed to be in condition for allowance as each is dependent from an allowable base claim.

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Conclusion

Applicant believes that all information and requirements for the application have been provided to the USPTO. If there are matters that can be discussed by telephone to further the prosecution of the Application, Applicant invites the Examiner to call the undersigned attorney at the Examiner's convenience.

The Commissioner is hereby authorized to charge any fees due with this filing to USPTO Account No. **50-4747**.

Respectfully submitted,

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